



MOTOR CONTROLLER Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A CURRENT PERPENDICULAR TO PLANE HEAD Applicant: Gill Docket: HSJ920030076US2/HITG.049PA Sheet 2 of 8 80 MOTOR

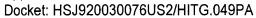
FIG. 2

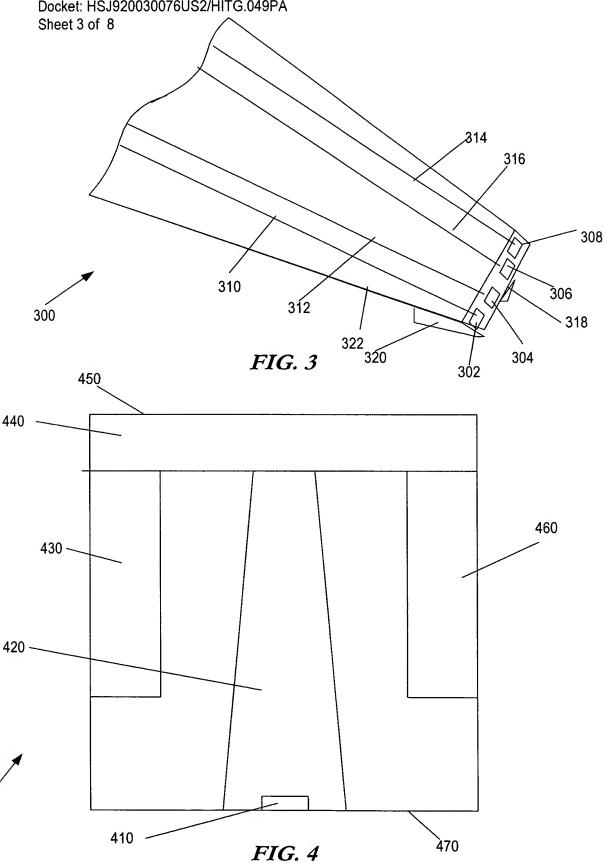


400

Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A CURRENT PERPENDICULAR TO PLANE HEAD

Applicant: Gill







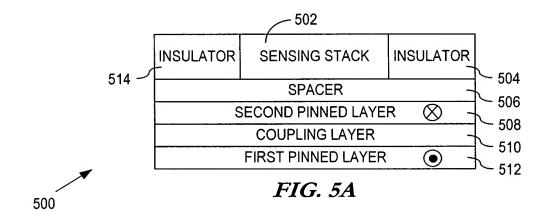
Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A

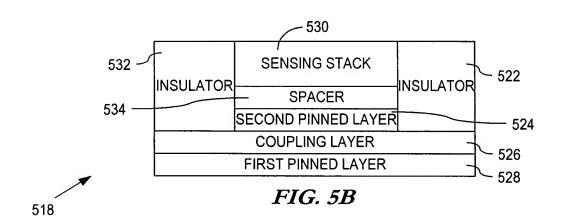
CURRENT PERPENDICULAR TO PLANE HEAD

Applicant: Gill

Docket: HSJ920030076US2/HITG.049PA

Sheet 4 of 8





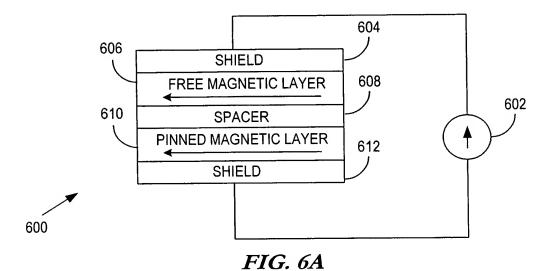


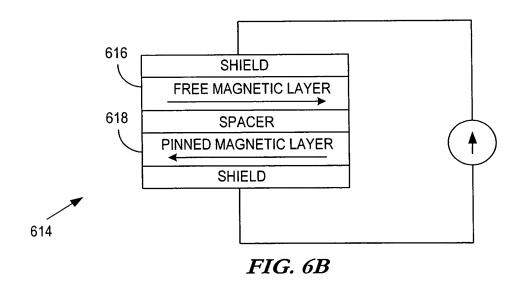
Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A CURRENT PERPENDICULAR TO PLANE HEAD

Applicant: Gill

Docket: HSJ920030076US2/HITG.049PA

Sheet 5 of 8

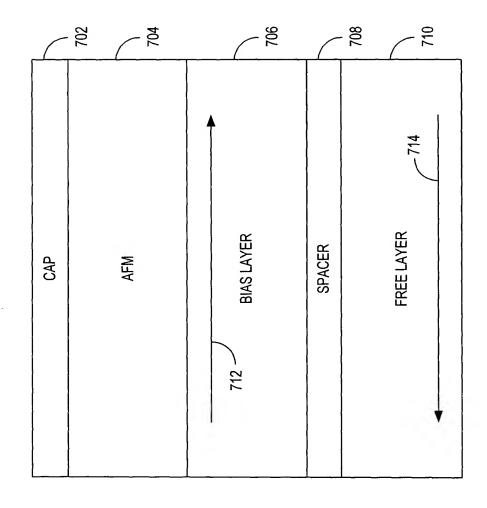






Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A CURRENT PERPENDICULAR TO PLANE HEAD

Applicant: Gill Docket: HSJ920030076US2/HITG.049PA Sheet 6 of 8





Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A CURRENT PERPENDICULAR TO PLANE HEAD 800, Applicant: Gill Docket: HSJ920030076US2/HITG.049PA Sheet 7 of 8 SHIELD NiFe (.5 - 2 microns) 802 Ta (~30 angstroms) 808 PtMn (>100 angstroms) 804 **BIASING** Al_2O_3 CoFe (>30 angstroms) Al_2O_3 **LAYER** Ta (5-20 angstroms) 806 CoFe or NiFe/CoFe **FREE** (~30 angstroms) **LAYER** 810 Cu (15-30 angstroms) **SECOND** 818 CoFe (15-40 angstroms) **PINNED LAYER** 812 Ru (~8 angstroms) **FIRST** CoFe (15-40 angstroms) **PINNED LAYER** 814 PtMn (< 30 angstroms or > 100 angstroms) NiFe (~8 angstroms) SEED NiFeCr (~30 angstroms) Ta (~30 angstroms) SHIELD NiFe (.5 - 2 microns) 816 FIG. 8



Title: APPARATUS FOR EXTENDED SELF-PINNED LAYER FOR A

CURRENT PERPENDICULAR TO PLANE HEAD

Applicant: Gill

Docket: HSJ920030076US2/HITG.049PA

Sheet 8 of 8

